

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

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JUL 23 1997

In the Matter of)

Annual Assessment of the Status of)
Competition in Markets for the)
Delivery of Video Programming)

CS Docket No. 97-141

FCC MAIL ROOM

NOTICE OF INQUIRY

COMMENTS OF THE WGBH EDUCATIONAL FOUNDATION IN THE NOTICE OF INQUIRY REGARDING VIDEO DESCRIPTION

To The Commission:

1. The WGBH Educational Foundation is writing in response to your request for comments in the "Notice of Inquiry," in the above-captioned proceeding, released June 3, 1997.

I. INTRODUCTION

2. The WGBH Educational Foundation is one of the country's leading public broadcasters and has long considered one of its central missions to be increasing access to media for people with disabilities. In 1971, WGBH established The Caption Center, the world's first captioning agency, to produce captions for TV programs so that deaf and hard-of-hearing viewers could gain equal access to those programs. Today, The Caption Center produces captions for every facet of the television and home video industry.

3. In 1990, after several years of testing, WGBH launched Descriptive Video Service® (DVS®) to provide access to TV programs and home videos for blind and visually impaired people. Today, such PBS programs as *Mystery!*, *Nature*, *The American Experience*, and home videos like *Schindler's List*, *Bambi*, *Star Wars*, *Forrest Gump* and many others inform and entertain people who previously were unable to gain access to this medium which continues to define our culture as we enter the 21st century. A partnership with the Turner Classic Movies cable channel in 1996 enables DVS to provide video description of one classic film per week.

4. In 1993, in partnership with the Corporation for Public Broadcasting, the CPB/WGBH National Center for Accessible Media (NCAM) was established as an R&D facility designed to extend WGBH's previous media access efforts into

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new media and to further the uses of captioning and descriptive video in the home, classroom, workplace, and community.

II FEASIBILITY

5. In its Notice of Inquiry ("NOI") in this matter¹, the FCC makes reference to the dependence, in part, on the implementation of advanced digital television for the expanded use of video description. Our efforts to work with the industry leaders developing the standards for digital television is discussed in Section VI of this filing. But digital television is still expected to be years away for many citizens while video description has proven its feasibility and has been working successfully for several years in today's NTSC television system on the Public Broadcasting Service and more recently on cable television through Turner Classic Movies (TCM) .

6. Since March of 1996 thirteen more public television stations have become SAP equipped (144 PTV stations in total) increasing the reach from 71% to 78% of U.S. households. The costs to add the SAP capability has ranged from \$5,000 to \$25,000 depending on the size of the station.

7. There has also been a significant increase in the availability of video description for the one participating cable channel, TCM, whose subscriber base has increased from 5 million to 16 million U.S. households. As part of a federal grant deliverable WGBH conducted a survey (10/96-2/97) of 408 cable systems representing the top 50 Designated Market Areas (DMA's) or 41,528,000 cable households. Half of the surveys were completed and 140 of the respondents indicated having the Secondary Audio Program (SAP) capability. See attached for sample survey and results. The costs for MVPDs to add the SAP capability has ranged from \$500 to \$5,000 depending on the local cable affiliate's existing equipment.

III COSTS

8. Video description rates at WGBH continue to drop due to increases in volume and efficiencies. At the time of WGBH's response to the initial NOI, in March of 1996, the costs ranged from approximately \$4,000 per program hour for broadcast programs to about \$10,000 per home video title. The per program hour for broadcast programs has been reduced by \$600 to \$3,400. The average home video title rate has been reduced by \$4,000 to \$6,000. Other video description vendors quote rates as low as \$1,000 per program hour.

¹ FCC Notice of Inquiry, "Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming," released June 3, 1997, CS Docket No. 97-141.

IV FUNDING

9. All of these rates represent an insignificant percentage of the production budgets of prime-time entertainment series. The production budgets for popular prime-time programs can be as much as \$1,300,000 per episode. The cost of adding video description, using the highest current rates, is one-quarter of 1% (.0026) of the production budget. This percentage rate would become even smaller with an increase in volume. (As noted under Section III Costs, video description rates have decreased with an increase in volume.) The FCC report on "Video Programming Accessibility"² recommended that initial requirements for video description should be applied to new programming that is widely available through national distribution services and which attracts the largest audiences such as prime-time entertainment series. It is not expected that the small amount of funding required, in relation to the budgets of the programming, can be made available via separate advertising support since video description is a public benefit for an audience that is not presently served by the marketplace. The small cost of this benefit should be born by the television industry (producers and providers) in return for their use of the public airwaves. When available, Federal funds can supplement private sector support.

10. More producers, distributors and underwriters have begun to pay for video description since those previously mentioned in WGBH's response to the initial Notice of Inquiry. Since March of 1996 WNET (New York), WMPT (Maryland), and IMAX® Corporation (large-format films) have all included video description in the production budgets of additional programs and films. GTE, the underwriter for SCIENTIFIC AMERICAN FRONTIERS, continues to fund the video description for the series. This is also true for General Motors and the latest Ken Burns documentary, THOMAS JEFFERSON. In addition WGBH has instituted a policy to include video description in the production budgets of all appropriate national productions. (WGBH produces about one-third of the prime-time national programming on PBS.) This policy is expected to significantly increase the volume of described programming on public television.

V COPYRIGHT ISSUES

11. Based on WGBH's experience in providing thousands of program hours with video description and more than 150 described videos WGBH

² See Implementation of Section 305 of the Telecommunications Act of 1996 - Video Programming Accessibility, MM Docket No. 95-176, Report, ¶ 140 (1996) ("Video Accessibility Report").

continues to have no difficulties with copyright protection of the original rights holders. Copyright holders have been more than willing to permit description to be added to their works since they continue to own the copyright on the described version of the work and the description adds value to the work.

VI IMPLEMENTATION USING DIGITAL TELEVISION

12. The technical standards for digital television allow for greater flexibility in the delivery of alternate audio services. But without strong integration of and support for these services from production to distribution, transmission and reception, their practical delivery will face many of the same barriers and limitations as analog SAP. Clearly, there is now the opportunity to design and shape digital standards and their use to provide more described video programming to all.

13. Following the Commission's adoption of digital television standards, deployment schedules and channel assignments in December 1996 and April 1997, work has begun in a variety of industry groups to determine how these guidelines will be implemented in practical terms. WGBH continues its participation in these activities as a major national producer and as a leader in media access technology. Currently, WGBH is involved in and is monitoring the work of the Advanced Television Systems Committee (ATSC) Implementation Subcommittee, the Society of Motion Picture and Television Engineers (SMPTE) Engineering Committee, the Audio Engineering Society (AES) and the Society of Cable Television Engineers (SCTE). These talks have raised some contentious issues and by no means assure adequate levels of service for blind and visually impaired consumers.

14. The digital television Standard adopted by the Commission [*ATSC Doc. A/53 ("ATSC Digital Television Standard, 16 Sep 95") and ATSC Doc. A/52 ("ATSC Digital Audio Compression Standard (AC-3), 20 Dec. 95")*] clearly provides the opportunity for a designated audio service for visually impaired audiences, as one of six "associated" audio services. The standard (*A/53, Annex B, Sec. 6.5*) defines the VI associated service as a single audio channel containing narrative description, to be reproduced simultaneously with a main audio service. Under this scenario, a digital television receiver would decode the narrative description and mix it with the main audio service using the dynamic range control signal. This would maintain high bit stream efficiency, eliminate delivery of redundant audio program information, and provide the visually impaired user easy access to video description. To date, there has been little evidence to suggest that this associated service will be supported in this way for wide use or as a universal feature on every receiver.

15. Equipment manufacturers have clearly indicated that audio decoders in digital sets will have very limited features, requiring video description to be delivered as an alternate, complete program mix. While allowed under the Standard, this approach will require a producer or distributor providing video description to allocate much greater bit-stream for a second, largely redundant audio program. In a single, high definition broadcast mode utilizing the full bit-stream, this might not be too difficult with current compression technology. But assuming much of digital television broadcasting will be in a standard definition (SDTV) multi-cast mode (four or more programs per digital broadcast channel), the need to provide description as a redundant full program mix will place a severe and unnecessary burden on the available bit stream, effectively establishing a negative incentive for producers, networks and local broadcasters to deliver the service.

16. In order to ensure the lowest costs to provide and deliver video description we recommend that:

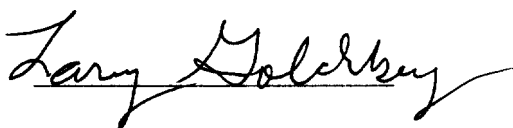
- a.) Video description be delivered as a single audio channel "VI associated service" as defined in the DTV standard (*ATSC Doc. A/53 ("ATSC Digital Television Standard, 16 Sep 95., Annex B, Sec. 6.5, Paragraph 1.)*)
- b.) all DTV receivers be equipped with the appropriate audio decoding and mixing capability to access and deliver the VI associated service as a single narrative channel mixed with the main audio program.
- c.) All DTV receivers be capable of selecting video description when available, as a standard default setting. Remote control devices should also allow easy alternative access to on-screen menus for visually impaired users.
- d.) Indication of availability of video description be included in program MAP tables and other video guides.

VII. CONCLUSION

17. It is up to the advocates for blind and visually impaired citizens to determine whether or not to recommend federal mandates for video description similar to captioning. As a vendor, WGBH, is not in the position to recommend mandates or voluntary compliance. As a public broadcaster WGBH's position continues to be a researcher and service provider of accessible media. Based on 25 years experience in media access and given the television industry and their trade associations responses to the FCC's previous NOI on video description (MM Docket No. 95-176) it appears unlikely that the service providers will voluntarily comply to make their programs and products accessible to blind and visually impaired viewers.

18. Like many ventures involving mass media, the success of video description has required ongoing collaborations of many partners from a variety of dedicated supporters in the public, private and non-profit sectors. Now that the Telecommunications Bill has become law, and closed captioning is about to be mandated for a broad spectrum of video programming, even more cooperation will be necessary to assure that blind and visually impaired Americans share in the technological benefits soon to be offered in communities throughout the country.

Respectfully Submitted,



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ATSC DIGITAL TV STANDARD A/53, ANNEX 8, Section 6.5

6.5 *Visually Impaired (VI)*

The VI associated service typically contains a narrative description of the visual program content. In this case, the VI service shall be a single audio channel. The simultaneous reproduction of both the VI associated service and the CM main audio service allows the visually impaired user to enjoy the main multi-channel audio program, as well as to follow (by ear) the on-screen activity.

The dynamic range control signal in this type of VI service is intended to be used by the audio decoder to modify the level of the main audio program. Thus the level of the main audio service will be under the control of the VI service provider, and the provider may signal the decoder (by altering the dynamic range control words embedded in the VI audio elementary stream) to reduce the level of the main audio service by up to 24 dB in order to assure that the narrative description is intelligible.

Besides providing the VI service as a single narrative channel, the VI service may be provided as a complete program mix containing music, effects, dialogue, and the narration. In this case, the service may be coded using any number of channels (up to 5.1), and the dynamic range control signal applies only to this service. The fact that the service is a complete mix shall be indicated in the AC-3 descriptor (see A/52, Annex A).

A/52 Digital Audio Compression Standard (AC-3), Annex A:

3.4...

full_svc — This is a 1-bit field which indicates whether or not this audio service is a full service suitable for presentation, or whether this audio service is only a partial service which should be combined with another audio service before presentation. This bit should be set to a '1' if this audio service is sufficiently complete to be presented to the listener without being combined with another audio service (for example, a visually impaired service which contains all elements of the program; music, effects, dialogue, and the visual content descriptive narrative). This bit should be set to a '0' if the service is not sufficiently complete to be presented without being combined with another audio service (e.g., a visually impaired service which only contains a narrative description of the visual program content and which needs to be combined with another audio service which contains music, effects, and dialogue).

WGBH Cable Survey Form

DMA San Fran-Oak-San Jose
DMA Ranking 6
City Pittsburg

Name of Cable Company Viacom Cable
MSO Tele-Communications Inc.

Address 550 Garcia Ave.
State CA
Zip Code 94565

Phone Number 510-432-0500
Fax Number 510-439-9537

Contact MrMarv Hansen
Title

Area Served Contra Costa

Channel Capacity 55
of Channels In Use 40
Basic Service Subscribers 54,000
Pay Service Subscribers 26,000

Spoke With **Title 2**

Search Tool

Last Edited

Date of Initial Contact

Record Number

347

1) Are you famillar with S.A.P.? ☒ Yes ☐ No

2) Do you have S.A.P? ☒ Yes ☐ No ☐ I don't know

WGBH Cable Survey Form

3) If "I don't know", Who do you recommend I speak with in your organization?

Rec. Contact name 1

Rec. Contact title 1

Rec. Contact phone number 1

Date to contact 1

Best time to contact 1

4) Do you carry any of the following networks, stations?

Turner Classic Movies Channel ☒ Yes ☐ No ☐ I don't know ☐ other ☐ Other...

Discovery Channel ☒ Yes ☐ No ☐ I don't know ☐ other ☐ Other...

Lifetime ☒ Yes ☐ No ☐ I don't know ☐ other ☐ Other...

USA Network ☒ Yes ☐ No ☐ I don't know ☐ other ☐ Other...

☒ Yes ☐ No ☐ I don't know ☐ other ☐ Other...

5) Do you know of any plans to carry any of these networks?

Turner Classic Movies Channel ☒ Yes ☐ No ☐ I don't know ☐ other ☐ Other...

Discovery Channel ☒ Yes ☐ No ☐ I don't know ☐ other ☐ Other...

Lifetime ☒ Yes ☐ No ☐ I don't know ☐ other ☐ Other...

USA Network ☒ Yes ☐ No ☐ I don't know ☐ other ☐ Other...

☒ Yes ☐ No ☐ I don't know ☐ other ☐ Other...

6) If "I don't know", Who do you recommend I speak with in your organization?

Rec. Contact name 1

Rec contact title 2

Rec contact phone number 2

Date to contact 2

Best time to contact 2

7) Do you currently pass through the S.A.P. signal?

Turner Classic Movies Channel ☒ Yes ☐ No ☐ I don't know ☐ other ☐ Other...

Lifetime ☒ Yes ☐ No ☐ I don't know ☐ other ☐ Other...

Discovery Channel ☒ Yes ☐ No ☐ I don't know ☐ other ☐ Other...

USA Network ☒ Yes ☐ No ☐ I don't know ☐ other ☐ Other...

☒ Yes ☐ No ☐ I don't know ☐ other ☐ Other...

WGBH Cable Survey Form

8) If "I don't know", Who do you recommend I speak with in your organization?

Rec contact name 3
Rec contact title 3
Rec contact phone number 3
Date to contact 3
Best time to contact 3

9) Do you know of any plans to add S.A.P. capability?

Turner Classic Movies Channel	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> I don't know	<input type="radio"/> other	<input type="radio"/> Other...
Lifetime	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> I don't know	<input type="radio"/> other	<input type="radio"/> Other...
Discovery Channel	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> I don't know	<input type="radio"/> other	<input type="radio"/> Other...
USA Network	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> I don't know	<input type="radio"/> other	<input type="radio"/> Other...
	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> I don't know	<input type="radio"/> other	<input type="radio"/> Other...

10) If "I don't know", Who do you recommend I speak with in your organization?

Rec contact name 4
Rec contact title 4
Rec contact phone number 4
Date to contact 4
Best time to contact 4

Comments

WGBH CABLE SURVEY RESULTS

Total # of Cable Systems in Universe 408 ***

Total # of Surveys Completed 202 *

Total # of Cable Systems that have SAP 140

% of Cable Systems within Universe that have SAP 34.3%

% of Survey Respondents that have SAP 69.3%

Total # of Cable Systems that have

	# with Service	% of surveys completed	% of universe
TCM	93	46.0%	22.8%
Discovery	199	98.5%	48.8%
Lifetime	199	98.5%	48.8%
USA	196	97.0%	48.0%
PBS	195	96.5%	47.8%

Total # of Cable Systems that plan to add

	# with Service	% of surveys completed	% of universe
TCM	15	7.4%	3.7%
Discovery	9	4.5%	2.2%
Lifetime	10	5.0%	2.5%
USA	9	4.5%	2.2%
PBS	NA	NA	

Total # of Cable Systems that have SAP capability on

	# with Service	% of surveys completed	% of universe
TCM	14	6.9%	3.4%
Discovery	12	5.9%	2.9%
Lifetime	12	5.9%	2.9%
USA	22	10.9%	5.4%
Unspecified	106	52.5%	26.0%

WGBH CABLE SURVEY RESULTS

Total # of Cable Systems that have plan to add SAP capability on

	# with Service	% of surveys completed	% of universe
TCM	8	4.0%	2.0%
Discovery	11	5.4%	2.7%
Lifetime	9	4.5%	2.2%
USA	9	4.5%	2.2%
Unspecified	10	5.0%	2.5%

Total # of Cable Systems that have SAP on (other channels)

	# with Service	% of surveys completed	% of universe
HBO	54	26.7%	13.2%
Cinemax	41	20.3%	10.0%
Showtime	19	9.4%	4.7%
Other: Request, HBO2, CSPAN, Star	3	1.5%	0.7%

MSO Information

Industry Rank	MSO Name	# Providers	# Providers w/SAP	% with SAP
**1	Tele-Communications Inc	74	24	32.4%
2	Time Warner	73	25	34.2%
3	Comcast Cable	30	1	3.3%
4	Continental Cablevision	38	8	21.1%
5	Cox Communications	17	9	52.9%
6	Cablevision Systems	17	5	29.4%
8	Adelphia	10	3	30.0%
10	Cablevision Industries	7	1	14.3%
11	Jones Intercable	9	4	44.4%
12	Falcon	2	1	50.0%
13	Sammons	1	0	0.0%
14	Century	9	4	44.4%
15	Charter	8	2	25.0%
16	Scripps Howard	4	2	50.0%

WGBH CABLE SURVEY RESULTS

17	Intermedia	10	3	30.0%
18	TKR	7	2	28.6%
19	Suburban	11	2	18.2%
20	Prime	2	1	50.0%
22	Post-Newsweek	2	1	50.0%
23	MediaOne	4	4	100.0%
27	C-TEC	3	1	33.3%
29	Rifkin	1	1	100.0%
30	Fanch	1	0	0.0%
32	SBC Media Ventures	2	1	50.0%
33	Harron	4	0	0.0%
34	Greater Media	2	1	50.0%
36	Media General	2	2	100.0%
37	US Cable	4	0	0.0%
38	Marcus	9	4	44.4%
42	Armstrong	3	0	0.0%
44	Insight	4	0	0.0%
46	Blade	1	0	0.0%
48	Pencor	3	3	100.0%
49	Booth American	2	0	0.0%

Comments

Among the comments received, the most frequent were:

Didn't know TCM had SAP programming;
would like to hear more about SAP; good for PR;

WGBH CABLE SURVEY RESULTS

About the Cable Universe

Top 50 DMA's by Cable Rank

41,528,000 cable households

66.40% of all cable households

Notes

* one received anonymously; therefore, results omitted.

**MSO rank from Broadcast & Cable Yearbook 1996 (Top 50 only)

***One provider in survey was unreachable;